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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/938,784	08/24/2001	Brian D. Ryder	COMP:0235	2946
7590	03/10/2004		EXAMINER	
INTELLECTUAL PROPERTY ADMINISTRATION Legal Department, M/S 35 PO BOX 272400 FT. COLLINS, CO 80527-2400			CHUNG, DANIEL J	
			ART UNIT	PAPER NUMBER
			2672	7
			DATE MAILED: 03/10/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/938,784	RYDER, BRIAN D.
	Examiner Daniel J Chung	Art Unit 2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 19 December 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-32 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-32 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 19 December 2003 is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

## DETAILED ACTION

Claims 1-32 are presented for examination. This office action is in response to the amendment filed on 12-19-2003.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

**Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunton (6,337,919) in view of Senior (6,400,836).**

Regarding claim 1, Dunton discloses that the claimed feature of a user input device ["mouse"; 10] comprising: a fingerprint scanner [i.e. "fingerprint sensor"; 24]; and a driver [i.e. "interface"; 26] operably coupled to the fingerprint scanner to enable the fingerprint scanner to perform a function, wherein the function ["conventional mouse function"] comprises at least one of a scroll function, a zoom function, a hot-key function, and a select function [i.e. mouse clicking function]. (See Fig 1, Fig 2, Fig 4, Abstract, col 3 line 39-48)

Dunton is silent to the fact that "performing the function comprises one of a scrolling, zooming, and selecting function". However, "conventional mouse function" of

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Dunton can be performed as “the select function” of recited claim, [i.e. icon clicking by mouse] Furthermore, such limitation is clearly shown in the teaching of Senior. [i.e. “allowing the user to control a variety of functions...” in Abstract line 7-11 of Senior] (See Abstract, col 1 line 66-col 3 line 7, col 3 line 34-44, col 5 line 27-30, col 6 line 55-col 7 line 16) It would have been obvious to one skilled in the art to incorporate the teaching of Senior into the teaching of Dunton, in order to provide “incorporating the pointing device functionality allows the fingerprint to be passively acquired, without requiring repeated explicit authentication which could take time and interrupt work flow” (See col 2 line 22-25 of Senior), as such improvement is also advantageously desirable in the teaching of Dunton for effectively providing fingerprint detecting mouse with multi-functional operations.

Regarding claim 2, Dunton discloses that the fingerprint scanner comprises a CCD array. (See col 2 line 10)

Regarding claim 3, refer to the discussion for the claim 1 hereinabove, Senior discloses that the driver is operable to configure a computer associated with the fingerprint scanner to switch between a security mode and the function. (See col 9 line 11-col 10 line 2)

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Regarding claim 4, refer to the discussion for the claim 1 hereinabove, Senior discloses that the software driver configures the computer to operate in a security mode while simultaneously performing at least one of a scroll function, a zoom function, a hot-key function, and a select function. (See col 9 line 64-col 10 line 2)

Regarding claim 5, Dunton discloses that the fingerprint scanner is disposed on a PCMCIA card. (See Fig 4)

Regarding claim 6, Dunton discloses that the fingerprint scanner comprises a USB interface. (See col 3 line 46-48)

Regarding claim 7, Dunton discloses that the fingerprint scanner is disposed on a mouse. (See Fig 1, Fig 2)

Regarding claim 8, Dunton discloses that the fingerprint scanner is disposed on a dumb terminal. (See Fig 1, Fig 2)

Regarding claim 9, refer to the discussion for the claim 1 hereinabove, Dunton discloses that the claimed feature of a computer system comprising: a processor [44]; a fingerprint scanner [24] operably coupled to the processor [44]; and a driver [26] to configure the fingerprint scanner to perform at least one of a scroll function, a zoom

function, a hot-key function, and a select function on the computer. (See Fig 1, Fig 2, Fig 4, Abstract, col 3 line 39-48)

Regarding claim 10, Dunton discloses that the processor is disposed on a CPU [44]. (See Fig 4)

Regarding claim 11, Dunton discloses that a first bridge unit [46] coupled to the CPU [44]; and an first expansion bus [54] coupled to the first bridge unit. (See Fig 4)

Regarding claim 12, Dunton discloses that the fingerprint scanner [24] is coupled to the first expansion bus [54]. (See Fig 4)

Regarding claim 13, Dunton discloses that a second bridge unit [58] coupled to the first expansion bus [54]; and a plurality of secondary expansion busses [62] coupled to the second bridge unit. (See Fig 4)

Regarding claim 14, Dunton discloses that the fingerprint scanner [24] is disposed on at least one of the plurality of secondary expansion buses [62]. (See Fig 4)

Regarding claim 15, Dunton discloses that a display [52] coupled to the first bridge unit [46]. (See Fig 4)

Regarding claim 16, Dunton discloses that the computer system is coupled for a network having a plurality of devices coupled thereto. (See col 2 line 47-53)

Regarding claim 17, refer to the discussion for claim 1 hereinabove, Dunton discloses that the claimed feature of a method of operating a fingerprint scanner [24] comprising the acts of: (a) configuring a computer to perform at least one of a scroll function, a zoom function, a hot-key function, and a select function in response to signals generated by the fingerprint scanner; and (b) generating signals based on input to the fingerprint scanner wherein the input to the fingerprint scanner comprises at least one of a unique image and motion. [i.e. "conventional mouse function"] (See Fig 1, Fig 2, Fig 4, Abstract, col 3 line 39-48)

Regarding claim 18, refer to the discussion for the claim 1 hereinabove, Senior discloses that monitoring the computer system to determine if a need arises to configure the computer for security mode; and configuring the computer for security mode when the need arises. (See col 9 line 11-col 10 line 2)

Regarding claim 19, refer to the discussion for the claim 1 hereinabove, Senior further discloses that the act of pressing an alternate select key to configure the computer to perform at least one of the scroll function, a zoom function, a hot-key function and a select function. (See col 3 line 34-44, col 6 line 55-67, col 7 line 5-16)

Regarding claim 20, refer to the discussion for the claim 1 hereinabove, Senior further discloses that the act of tapping the fingerprint reader to configure the computer to perform at least one of the scroll function, a zoom function, a hot-key function and a select function. (See col 3 line 34-44, col 6 line 55-67, col 7 line 5-16)

Regarding claim 21, refer to the discussion for the claim 1 hereinabove, Senior further discloses that the act recognizing an acquired fingerprint as corresponding to the appropriate function to configure the computer to perform at least one of the scroll function, a zoom function, a hot-key function and a select function. (See col 3 line 34-44, col 6 line 55-67, col 7 line 5-16)

Regarding claim 22, refer to the discussion for the claim 1 hereinabove, Dunton discloses that the claimed feature of a method of manufacturing a computer system comprising the acts of: (a) providing a fingerprint scanner; (b) providing a processor; (c) operably coupling the fingerprint scanner to the processor; and (d) providing software that configures the processor to interpret signals from the fingerprint scanner as one of a scroll function, a zoom function, a hot-key function, and a select function. (See Fig 1, Fig 2, Fig 4, Abstract, col 3 line 39-48)

Regarding claim 23, refer to the discussion for the claim 1 hereinabove, Dunton discloses that the claimed feature of method a method of using a fingerprint scanner configurable to control one of a scroll function, a zoom function, a hot-key function, and

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a select function, the method comprising the act of: moving a finger on the fingerprint scanner to cause the one of a scroll function, a zoom function, a hot-key function, and a select function. (See Fig 1, Fig 2, Fig 4, Abstract, col 3 line 39-48)

Regarding claim 24, refer to the discussion for the claim 1 hereinabove, Senior further discloses that the act of pressing an alternate select key while simultaneously placing a finger on the fingerprint scanner. (See col 3 line 34-44, col 6 line 55-67, col 7 line 5-16)

Regarding claim 25, refer to the discussion for the claim 1 hereinabove, Senior further discloses that the act of tapping a finger on the fingerprint scanner. (See col 3 line 34-44, col 6 line 55-67, col 7 line 5-16)

Regarding claim 26, refer to the discussion for the claim 1 hereinabove, Dunton discloses that the claimed feature of a computer system comprising: means for configuring a computer to perform at least one of a scroll function, a zoom function, a hot-key function, and a select function in response to signals generated by the fingerprint scanner; and means for generating signals based on input to the fingerprint scanner wherein the input to the fingerprint scanner comprises at least one of a unique image and motion. (See Fig 1, Fig 2, Fig 4, Abstract, col 3 line 39-48)

**Claims 27-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunton (6,337,919) in view of Brownlee (6,282,303).**

Regarding claim 27, Dunton discloses that the claimed feature of a method of acquiring finger movement velocity and direction information, the method comprising the acts of: (a) acquiring a first digital image of a fingerprint; (b) acquiring a second digital image of a fingerprint at a specific time after acquiring the first digital image; and (c) comparing the first and second digital images for differences to calculate velocity and direction between the first and second digital images. (See Fig 1, Fig 2, Fig 4, Abstract, col 3 line 39-48)

Dunton does not explicitly disclose that calculating finger movement velocity and direction information. However, such limitation is shown in the teaching of Brownlee. (See col 1 line 33-37, col 3 line 43-46, col 4 line 66-col 5 line 12) it would have been obvious to one skilled in the art to incorporate the teaching of Brownlee into the teaching of Dunton, in order to detect/track the image of the fingerprint properly, as such improvement is also advantageously desirable in the teaching of Dunton for controlling the position of cursor effectively

Regarding claim 28, Dunton discloses that the act (c) is performed by a computer system coupled to a fingerprint reader. (See Fig 1, Fig 2, Fig 4)

Regarding claim 29, Dunton discloses that the act (c) is performed by firmware disposed in a fingerprint reader. (See Fig 1, Fig 2, Fig 4)

Regarding claim 30, refer to the discussion for the claim 27 hereinabove, Dunton discloses that the claimed feature of an input device comprising: a fingerprint reader; and a unit coupled to the fingerprint reader adapted to calculate velocity and direction based on movement of an object on the fingerprint reader. (See Fig 1, Fig 2, Fig 4, Abstract, col 3 line 39-48)

Regarding claim 31, Dunton discloses that the unit coupled to the fingerprint reader comprises firmware disposed in the fingerprint reader. (See Fig 1, Fig 2, Fig 4)

Regarding claim 32, Dunton disclose that the unit coupled to the fingerprint reader comprises a processor configured by a software driver. (See Fig 1, Fig 2, Fig 4)

#### ***Response to Arguments***

Applicant's arguments with respect to claims 1-32 have been considered but are moot in view of the new ground(s) of rejection. Specifically, in response to the applicant's argument that "Holehan reference should be removed from consideration in accordance with 35 USC § 103© and M.P.E.P. § 706.02(1) because the Holehan reference is only applicable as prior art under section 102(e) and because the Holehan reference and the present application were, at the time the invention was made, owned

by, or subject to an obligation of assignment to, Compaq Information Technologies Group, L.p.", Holehan references has been removed from consideration and the new ground of rejection is made with newly submitted reference (Dunton). See the rejection hereinabove.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Chung whose telephone number is (703) 306-3419. He can normally be reached Monday-Thursday and alternate Fridays from 7:30am- 5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael, Razavi, can be reached at (703) 305-4713.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

djc  
February 25, 2004

*Jeffrey A. Brier*  
JEFFERY BRIER  
PRIMARY EXAMINER